U.S. Patent Appl. Serial No.: 09/600,434
Applicant: Pascal Portrait

REMARKS

Claims 1, 2, 4-6, 8, 10, 12, 13 and 16-20 are currently pending in this Application with claims 12, 13, 16-18 and 20 being allowed. Claims 3, 7, 9, 11, 14, 15 and 21 have previously been canceled. Claims 1, 2, 4-6, 8, and 10 stand rejected and claim 19 stands objected to. A request for a one-month extension of time with payment of the appropriate fee is submitted herewith which extends the time of reply to January 8, 2004.

Claim Objections (Claim 19)

Applicant notes with appreciation the Examiner's indication that claim 19 would be allowable if rewritten in independent format. Applicant has rewritten claim 19 in independent format and allowance of claim 19 is earnestly requested.

35 U.S.C. § 102 Rejections (Claim 10)

The Examiner rejected claim 10 under 35 U.S.C. § 102(b) as being anticipated by *Dietrich* et al. (U.S. Patent No. 5,657,610). The Examiner asserts that *Dietrich* discloses a mechanism for grouping articles in which an endless conveyor moves an endless series of channels (depressions (39)) along which articles are passed and that articles are organized into groupings (product bowls (38)) which are then subdivided into sub-groupings (depressions (39)) and pushed into containers.

The rejection of claim 10 is respectfully traversed. It is respectfully submitted that *Dietrich* does not teach or disclose every limitation of claim 10, including the limitation that the channels diverge into sub-groupings.

The present invention allows for the insertion of articles into article receiving cells of a carton. Groupings of channels having a first parallel portion are provided to receive a plurality of articles in a group which will be inserted into a particular carton. The channels diverge from this first parallel grouping to form sub-groupings (164) (Figure 6) so that the group of articles to be provided to the carton is divided into article sub-groups which will be provided to particular

receiving cells. Thus, a plurality of articles to be provided to a specific blank may first be grouped together in parallel portions of the channels and then split into sub-groups of articles to be inserted into a particular receiving cell. For example, as shown in Figure 6, a first group of four parallel channels receives a group of four articles. The channels then diverge into two sub-groupings of two channels to hold two sub-groups of two batteries so that two batteries may be placed in each receiving cell C1 and C2.

(1) *Dietrich* does not teach or disclose the divergence of the channels into sub-groupings from an initial grouping. In *Dietrich*, ampuls are placed in first depressions (39) of product bowls (38) and then moved directly into openings (28) formed in support frame (25) from the depressions (39) (FIG. 1). Thus, while the depressions (39) may receive a group of ampuls for insertion into support frame (25), the depressions do not diverge into sub-groupings as required by claim 10. *Dietrich* teaches that the depressions are maintained in parallel fashion and are aligned with cutouts (28) so that ampuls (30) may be directly inserted into cutouts (28):

> Product bowls 38, in whose depressions 39 the ampuls 30, intended for a folding box 15, as well as the packing slip 35 placed on the ampuls 30, are conveyed, are arranged, aligned with the fold boxes 15 and moving along with the fold boxes 15, on a second conveyor belt 37. The arrangement of the ampuls 30 and the packing slip 35 in the product bowl 38 is such that they are aligned with the openings 28 or the pocket 34 when the support frame is raised.
>
> An insertion device 42, aligned with each product bowl 38, is associated with the latter, whose insertion slides 45, adapted to the number and shape of the ampuls 30, can be moved crosswise to the conveying direction of the fold boxes 15 into the latter. Furthermore, two pins 46 used as a stop for the packing slip 35, are disposed on at least two insertion slides 45, which are respectively associated with a product bowl 38.
>
> (Col. 2, ln. 19-34)

The claimed invention has initial parallel groupings of the channels which diverge into sub-groupings, thereby allowing the receiving cells of the carton to be misaligned with the initial

parallel portion of the channels. Thus, articles may be received as a group in close proximity to each other in the initial parallel portions, separated into subgroups by the divergence of the channels into sub-groupings, and then the sub-groups of articles delivered to a particular receiving cell by the sub-groupings, which are spaced differently than the initial parallel portion.

Thus, claim 10 requires at least two channels in substantially parallel relationship to one another that diverge into a plurality of sub-groups with each sub-group spaced to align an article held in each sub-group with one of the article receiving cells. Applicant has amended claim 10 to more particularly recite that each channel grouping corresponds to a group of articles to be loaded into the carton and that the sub-groupings are used to divide the group of articles into sub-groups for insertion into one of the article receiving cells. No new matter has been entered. (See e.g., Figures 4 & 6; Spec. ¶¶ 51-52) *Dietrich* does not teach or disclose diverging channels. Claim 10 is believed to be in condition for allowance and withdrawal of the rejection of claim 10 is respectfully requested.

35 U.S.C. § 103 Rejections (Claims 1, 2, 4-6, 8 and 9)

The Examiner rejected claims 1, 2, 4-6, and 8 under 35 U.S.C. § 103(a) as being unpatentable over *Moncrief* (U.S. Patent No 5,531,661). The Examiner asserts that *Moncrief* discloses a method and apparatus for forming cartons in which a collapsed sleeve or carton blank (B) is conveyed past a die member (feed roll (36)) which has an indentation (cutaway (58)) and that a complementary die member (nip roll (38)) is provided to work with the die member (36).

The Examiner asserts that lug (62) is a protrusion that acts with the complementary die (38) and is synchronized so that it is pressed by the complementary die to fit into the indentation of the die member (36). The Examiner further asserts that the blank in *Moncrief* is folded/opened by die member (70), which has a protrusion (68) that helps to open the blank.

The Examiner acknowledges that *Moncrief* does not disclose the use of a die with an indentation/complementary die with a protrusion for the opening/folding blank. But the Examiner asserts that *Moncrief* discloses the use of a die with an indentation/complementary die with a protrusion for initial handling of the blank and that it would have been obvious to one of

ordinary skill in the art at the time the invention was made to provide the invention of *Moncrief* with a die with an indentation to work in a complementary manner with the die (70) with the protrusion (68), as taught by die/complementary die pair (36, 38), in order to more positively control the blank as it is handled throughout the process.

The rejection is respectfully traversed. Independent claims 1 and 8 require complementary die members that act on the carton. One of the complementary die members has a protruding portion extending from a working face thereof and the other complementary die member has a recessed portion adapted to receive the protruding portion. When the blank is placed on the receiving member, the protruding portion forces part of the blank into the receiving portion. It is respectfully submitted that *Moncrief* does not disclose these limitations.

Moncrief discloses a method to open a collapsed sleeve. In *Moncrief*, a feed roll (36) having a cutaway portion (58) and a nip roll (38) form a nip through which a collapsed sleeve B is moved. (FIG. 4; Col. 3, ln. 52-67) Vacuum cups (40) are used to pull collapsed sleeves into the nip. After the sleeve B moves through the nip, a lug (62) on a chains (66) engages the trailing edge of the sleeves B to push the sleeve along a table. A rotating cam (68) pushes against the lower surface of a flap of the sleeve so that the flap rides up a ramp or stationary cam (72) to fold the flap. (Col. 4, ln. 47-Col. 5, ln. 15)

The Examiner acknowledges that nip roll (38) does not have a protrusion and that lug (62) is not connected physically to the nip roll (38), but asserts that the lug (62) is a protrusion that engages a cutaway (58) of the feed roll (36). It is respectfully submitted that lug (62) does not engage the cutaway (58) of feed roll (36) as asserted by the Examiner. As shown in Fig. 5, lug (62) on chain (66) is not aligned with the feed roll (36) but instead passes interior of feed roll (36) and thus cannot engage the feed roll cutaway (58). In fact, the upper sprocket (64) which carries the chain (66) and lug (62) is mounted on the same shaft as the nip roll (which is aligned with the feed roll) thereby preventing the alignment and engagement of lug (62) in cutaway (58) of the feed roll (36). (Col. 3 ln. 52-Col. 4 ln. 13) The lack of engagement between lug (62) and cutaway (58) of feed roll (36) is also evident by the different shapes of the cutaway (58) and the lug (62). In fact, the reference teaches away from engagement of the lug (62) and the cutaway (58) by teaching that the lug (62) engages the blank (abuts the trailing edge) after the blank has

moved through the nip. (col. 4, ln. 9-12). This would thus prevent the engagement of the lug (62) and the cutaway (58) to form recesses in the blank. Furthermore, the specification makes clear that the lug (62) engages the blank by pushing it, not by folding it in some way. (Col. 3, ln. 64-67).

The cam (68) relied upon by the Examiner also does not engage another "die" but merely assists in opening the collapsed sleeve by pushing upward on flaps so that the blank, being pushed by lugs (62), engages ramps 72. There is no engagement of the cam (68) with a complementary die, and as discussed above, there is not teaching of engagement between a protrusion and a complementary die in the reference. The pushing and lifting functions of the cam (68) is completely different from the cutting and forming operations of the dies of the present invention in which there is engagement of a protruding portion extending from a working face of a die with a recessed portion of a complementary die. Thus, the Examiner's references fail to teach the present invention as well as provide a motivation or suggestion to modify the cited art as the Examiner has suggested.

For the reasons above, it is respectfully submitted that independent claims 1 and 8 are patentable over the cited references and withdrawal of the rejection of claims 1 and 8 is earnestly requested. It is also believed that dependent claims 2 and 4-6, which depend from claim 1, are also allowable by reason of being based upon an allowable base claim as well as additional limitations included in those claims. Reconsideration of the rejection of claims 2 and 4-6 is respectfully requested.

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It is believed that this Application is in condition for allowance and Applicant respectfully requests that a timely Notice of Allowance be issued. A one month extension of time is attached hereto, and the Commissioner is authorized to charge Deposit Account No. 20-1507 for the extension fee of $110. No additional fees are believed due. Should any minor points remain prior to issuance of a Notice of Allowance, the Examiner is requested to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

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Amendment
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